MARYLAND
Department of Health

Public Health Preparedness and Situational Awareness Report: #2018:50

Reporting for the week ending 12/15/18 (MMWR Week #50)

December 21, 2018

CURRENT HOMELAND SECURITY THREAT LEVELS
National: **No Active Alerts**
Maryland: **Normal (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2018.

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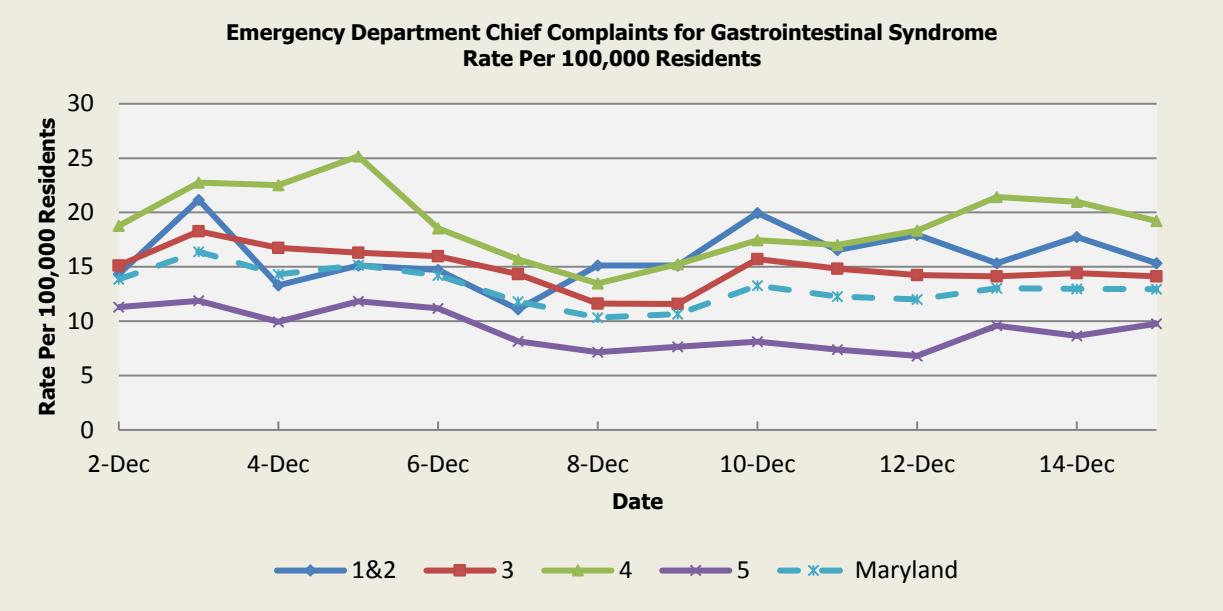
Gastrointestinal Syndrome



There were twelve (12) Gastrointestinal Syndrome outbreaks reported this week: four (4) outbreaks of Gastroenteritis in Nursing Homes (Regions 3,4); two (2) outbreaks of Gastroenteritis in Assisted Living Facilities (Region 3); two (2) outbreaks of Gastroenteritis associated with Schools (Region 3,5); one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with a Workplace (Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with a Workplace (Region 3); one (1) outbreak of Scombroid Poisoning associated with a Private Home (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.06	15.04	15.72	10.16	13.05
Median Rate*	12.91	14.80	15.24	10.04	12.93

** Per 100,000 Residents*

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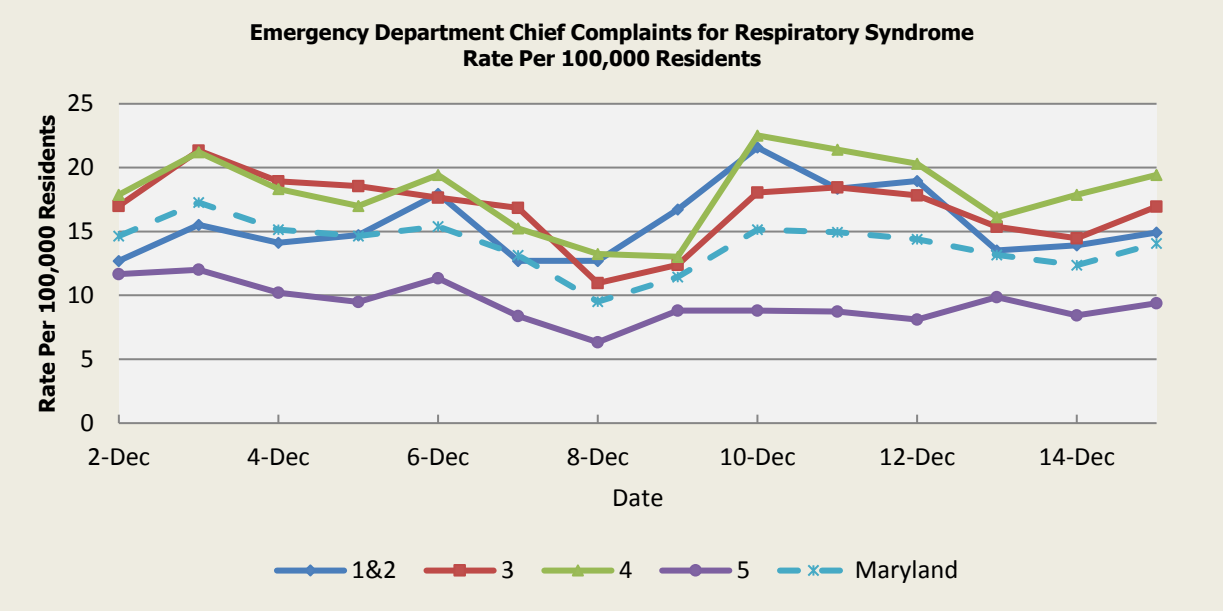
Respiratory Syndrome



There were no Respiratory Syndrome outbreaks reported this week.

	Respiratory Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.43	14.60	14.82	9.90	12.63
Median Rate*	11.90	14.03	14.13	9.52	12.15

** Per 100,000 Residents*

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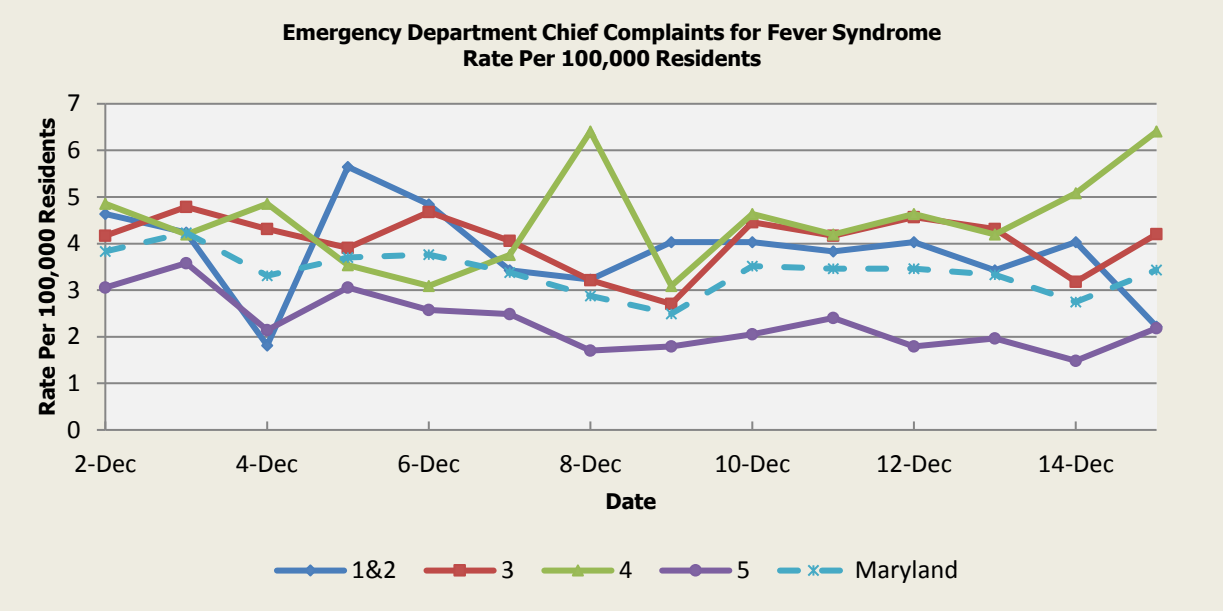
Fever Syndrome



There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.01	3.87	4.02	3.02	3.48
Median Rate*	2.82	3.73	3.75	2.92	3.36

**Per 100,000 Residents*

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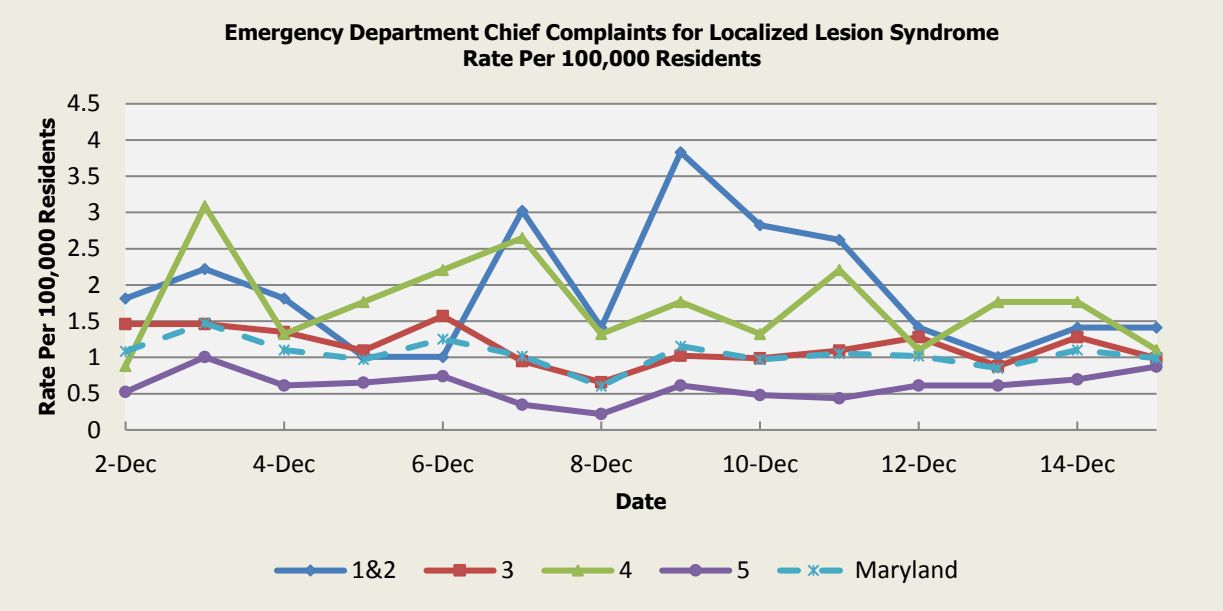
Localized Lesion Syndrome



There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.08	1.83	2.05	0.92	1.44
Median Rate*	1.01	1.75	1.99	0.87	1.37

** Per 100,000 Residents*

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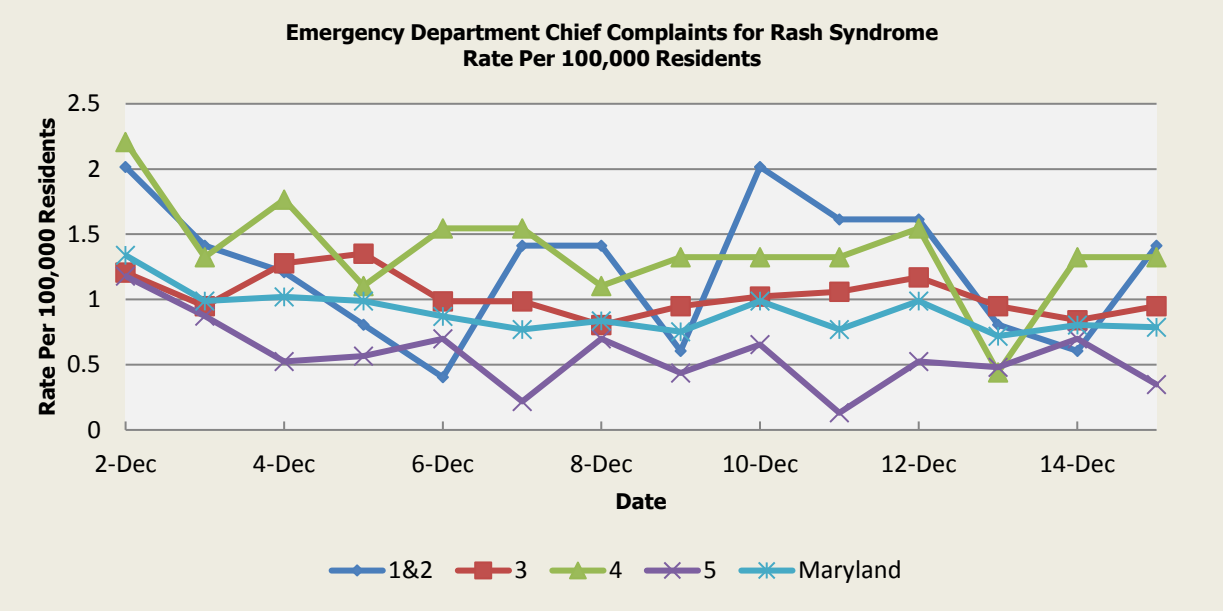
Rash Syndrome



There was one (1) Rash Syndrome outbreak reported this week: one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 5).

	Rash Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.70	1.78	0.99	1.40
Median Rate*	1.21	1.64	1.77	0.96	1.34

** Per 100,000 Residents*

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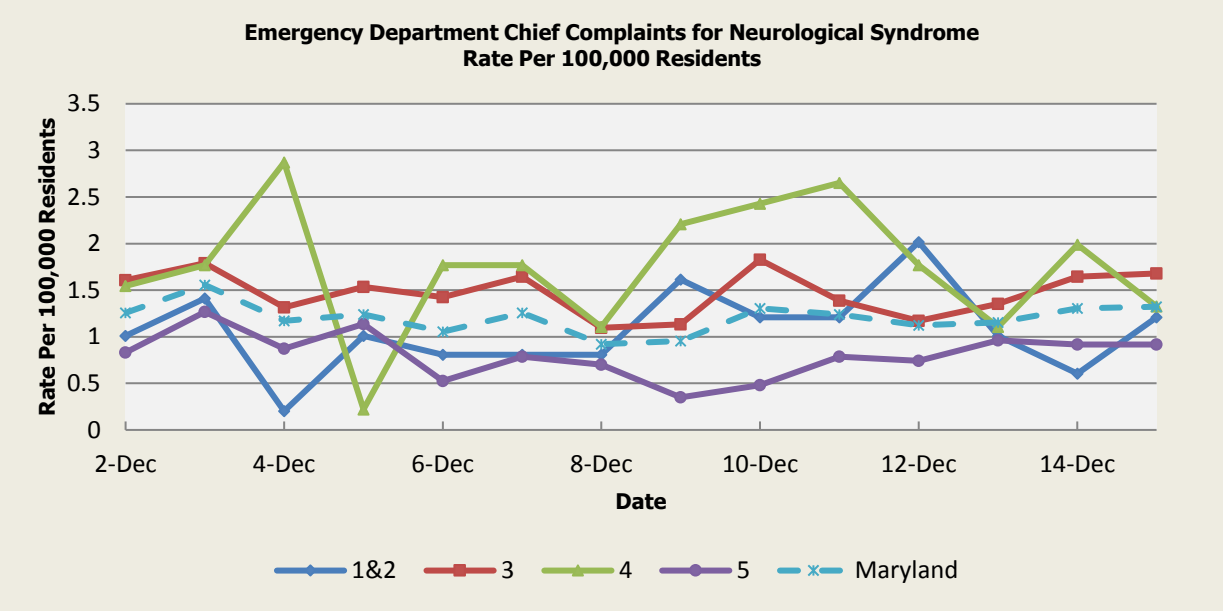
Neurological Syndrome



There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.74	0.91	0.82	0.57	0.76
Median Rate*	0.60	0.80	0.66	0.52	0.67

** Per 100,000 Residents*

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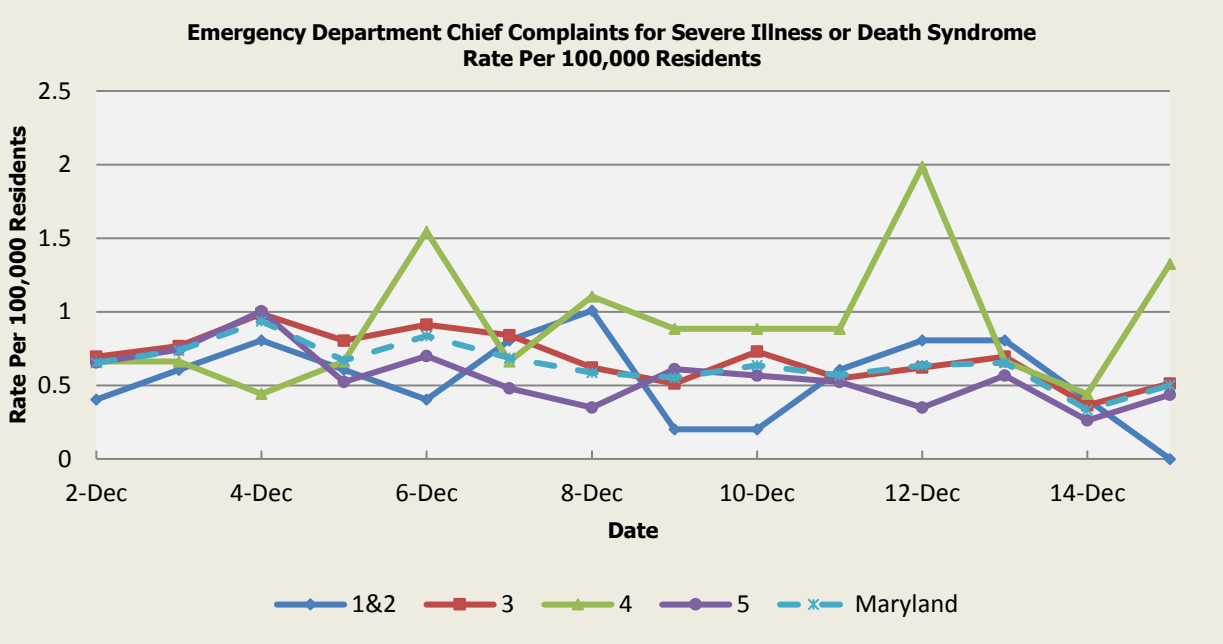
Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.91	0.82	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

** Per 100,000 Residents*

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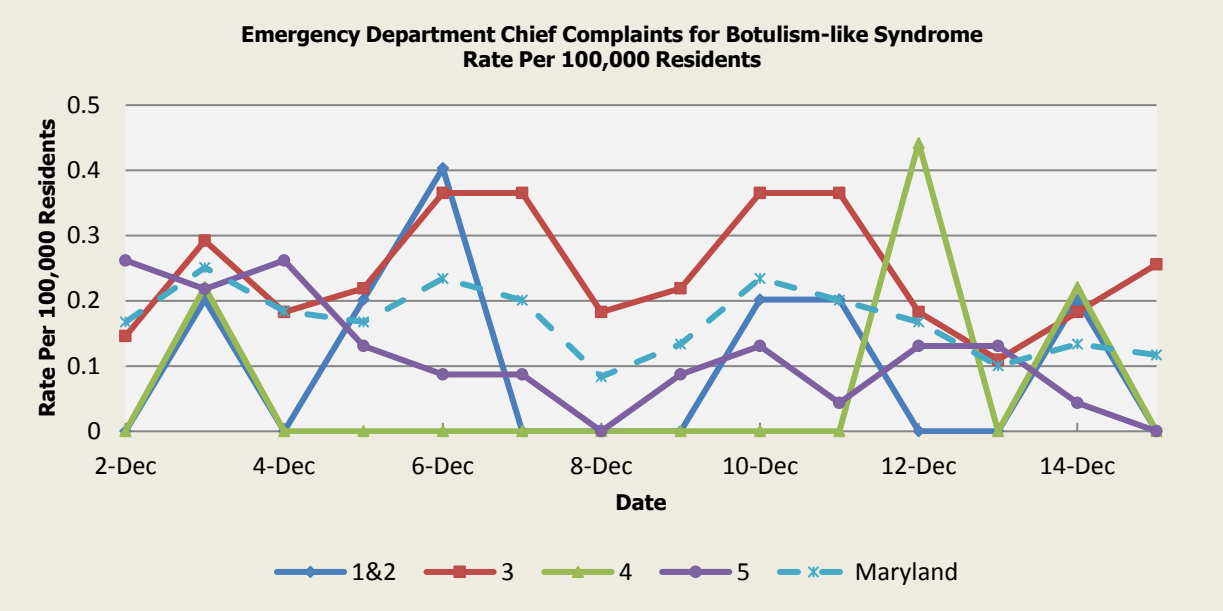
SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 12/3 (Regions 1&2,3,4,5), 12/4 (Region 5), 12/5 (Regions 1&2,5), 12/6 (Regions 1&2,3), 12/7 (Region 3), 12/10 (Regions 1&2,3), 12/11 (Regions 1&2,3), 12/12 (Region 4), 12/14 (Regions 1&2,4), 12/15 (Region 3). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present				
Health Region	0.07	0.11	0.05	0.07	0.09
Mean Rate*	0.07	0.11	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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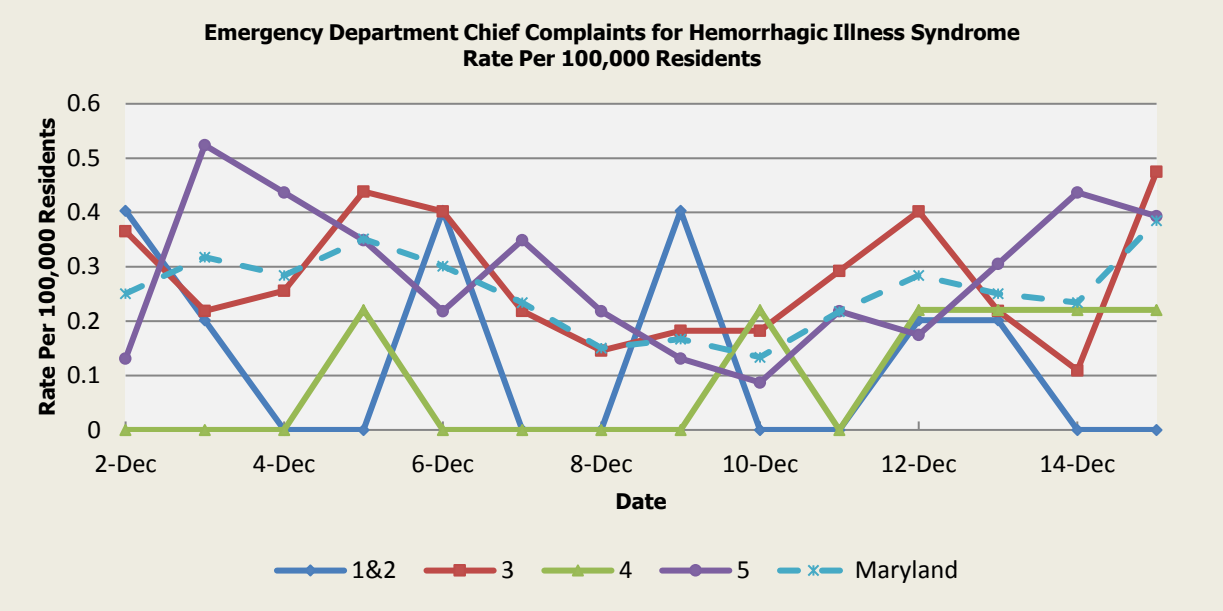
Hemorrhagic Illness Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 12/2/ (Regions 1&2,3), 12/3 (Regions 1&2,5), 12/4 (Region 5), 12/5 (Regions 3,4,5), 12/6 (Regions 1&2,3), 12/7 (Region 5), 12/9 (Regions 1&2), 12/10 (Region 4), 12/12 (Regions 1&2,3,4), 12/13 (Regions 1&2,4,5), 12/14 (Regions 4,5), 12/15 (Regions 3,4,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.15	0.03	0.11	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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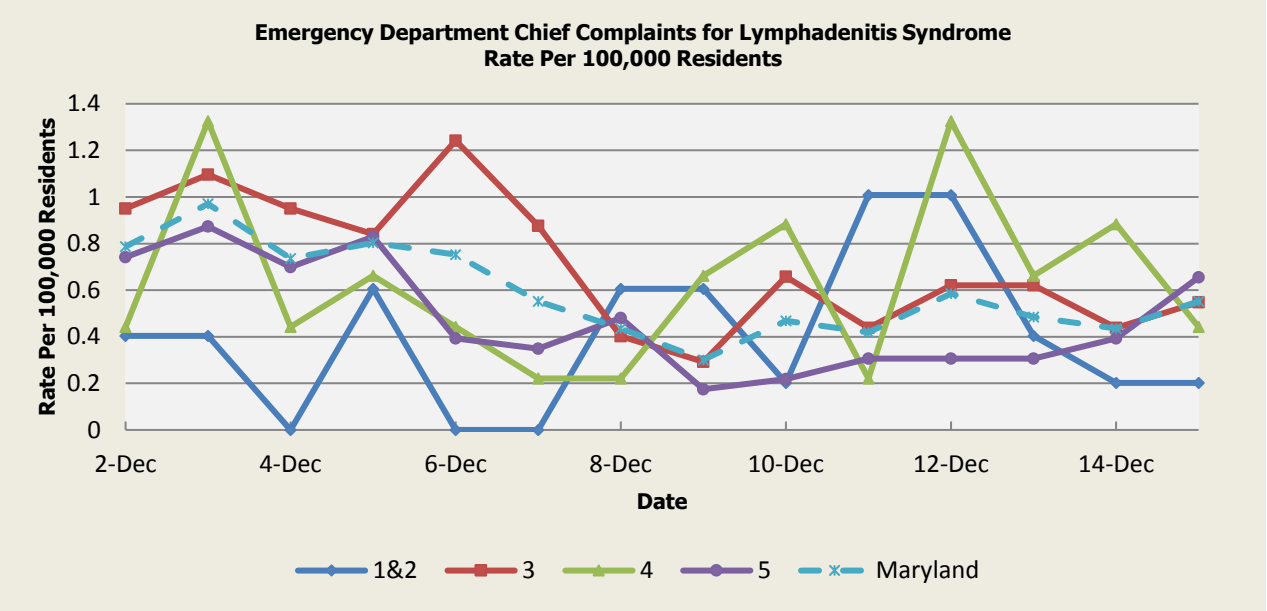
Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 12/2 (Region 5), 12/3 (Regions 4,5), 12/5 (Region 5), 12/6 (Region 3), 12/10 (Region 4), 12/11 (Regions 1&2), 12/12 (Regions 1&2,4), 12/14 (Region 4). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.34	0.57	0.39	0.36	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.38

** Per 100,000 Residents*

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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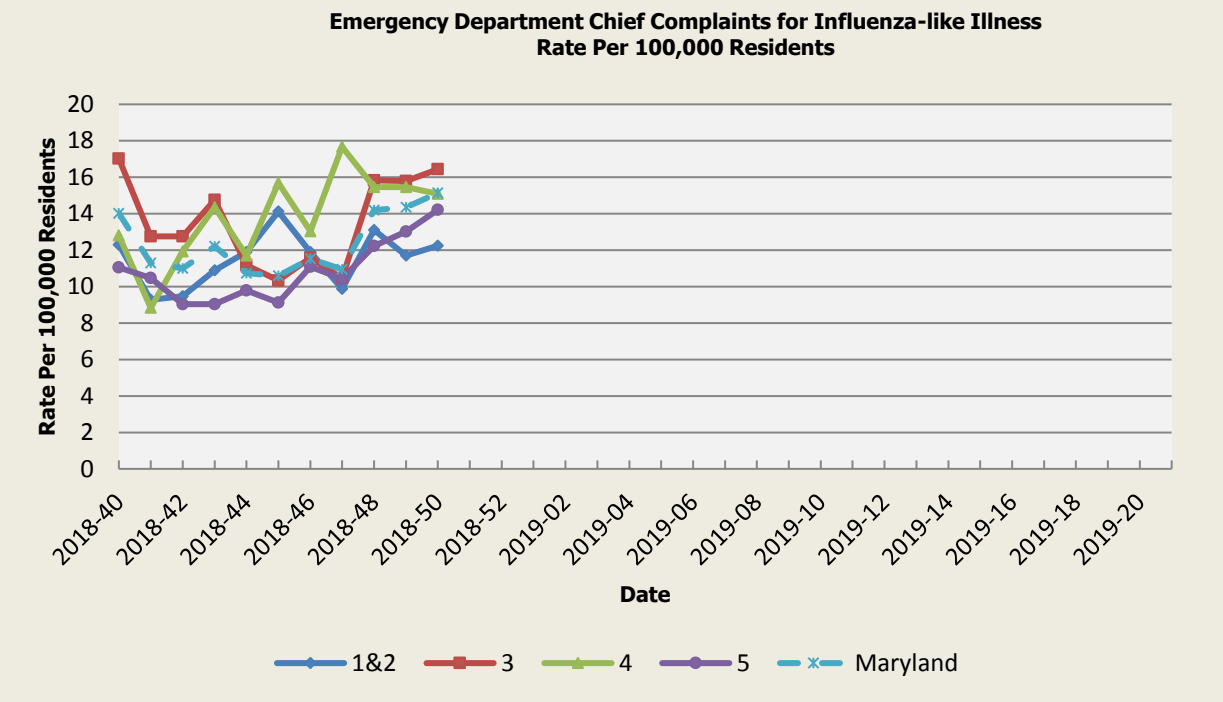
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 50 was: Local Geographic Spread with Minimal Intensity.

Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.25	16.43	15.08	14.21	15.13
Median Rate*	7.66	9.65	9.05	8.45	8.99

** Per 100,000 Residents*

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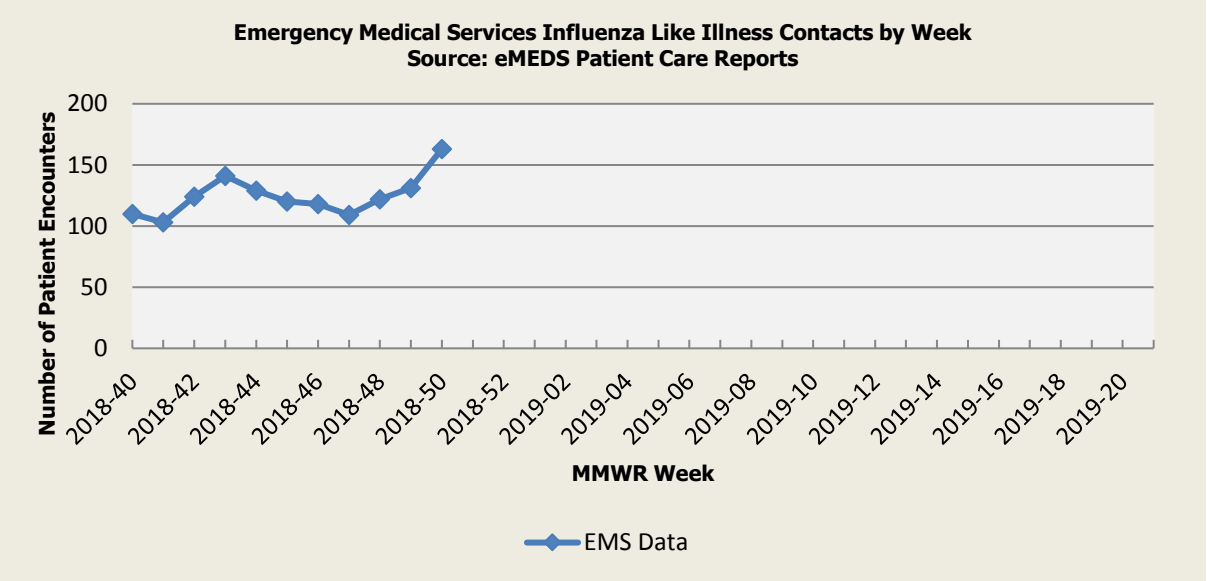
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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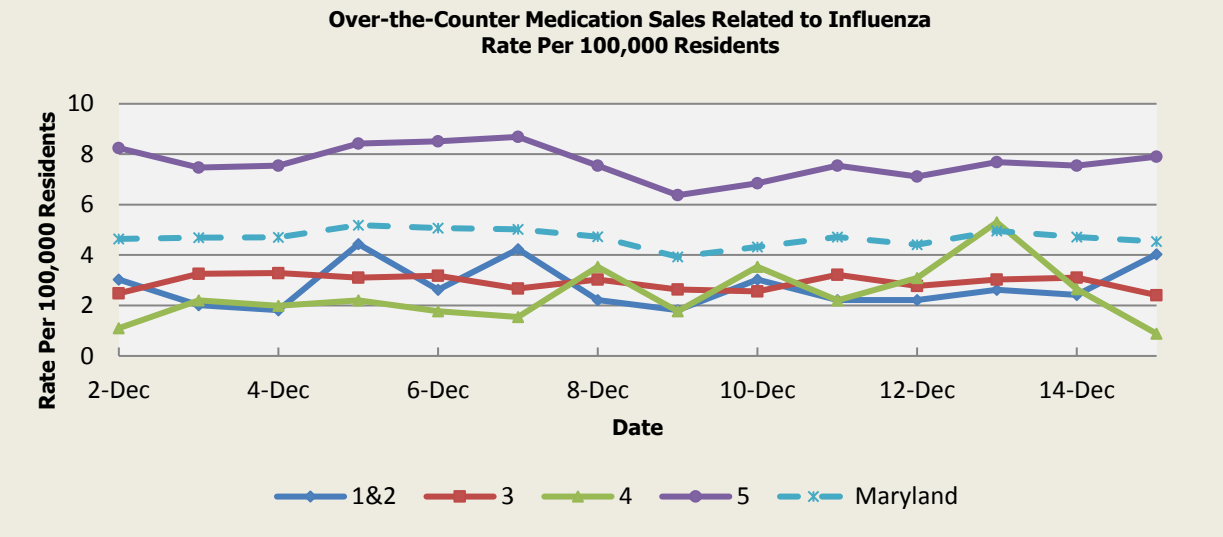
Over-the-Counter Influenza-Related Medication Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.62	4.69	2.74	8.10	5.76
Median Rate*	2.82	3.95	2.43	7.47	5.10

** Per 100,000 Residents*

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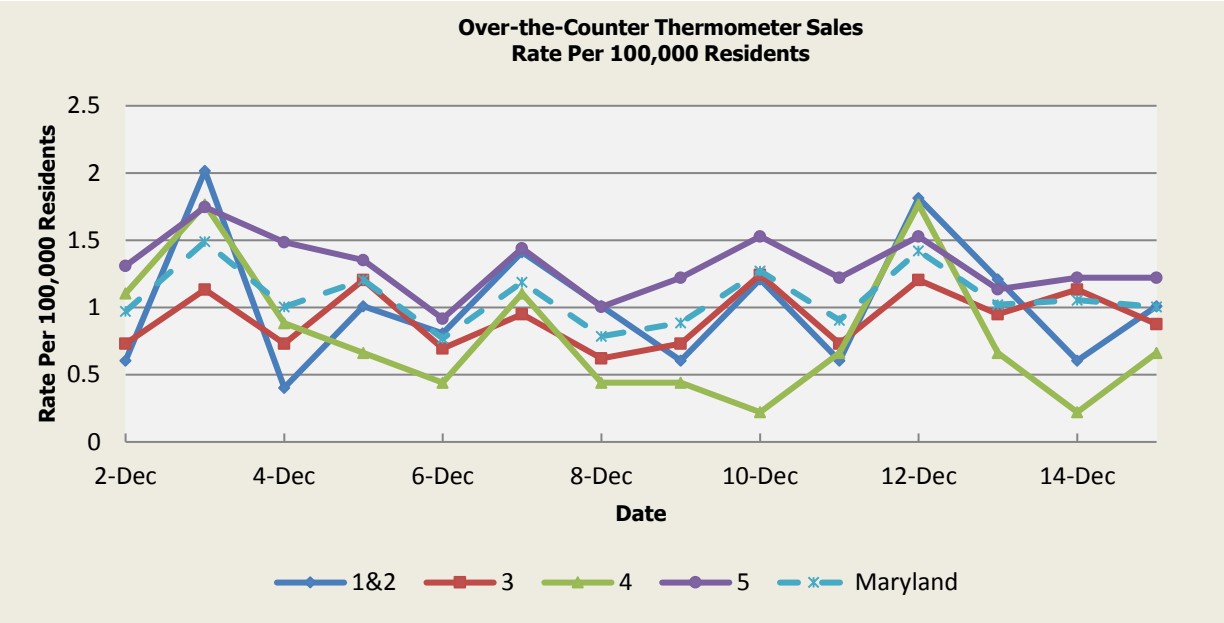
Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.14	3.00	2.37	3.99	3.34
Median Rate*	2.82	2.81	2.21	3.80	3.18

** Per 100,000 Residents*

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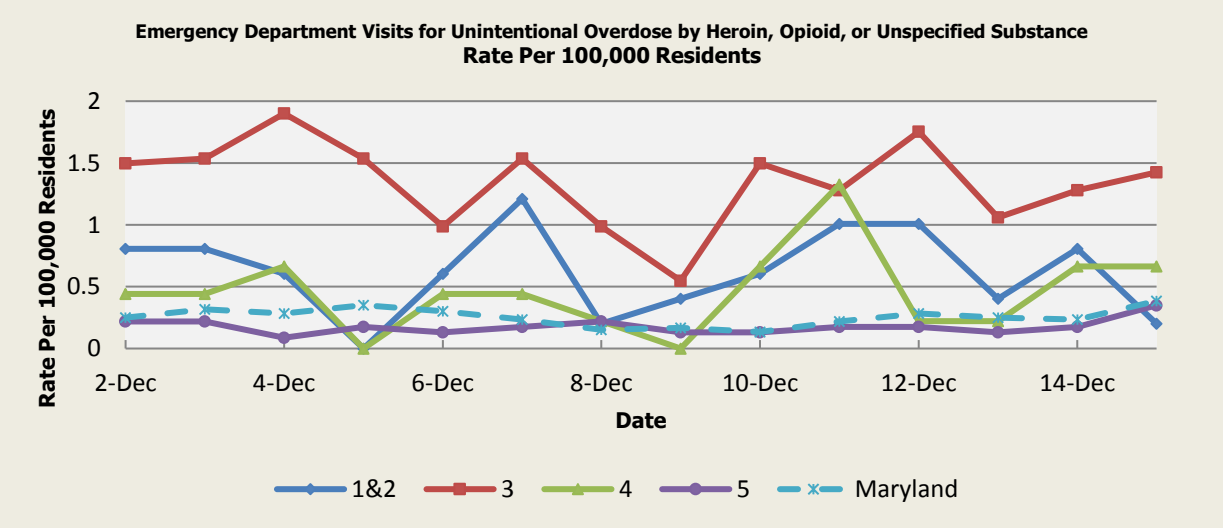
SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

Unintentional Overdose by Heroin, Opioid, or Unspecified Substance



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

	Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

** Per 100,000 Residents*

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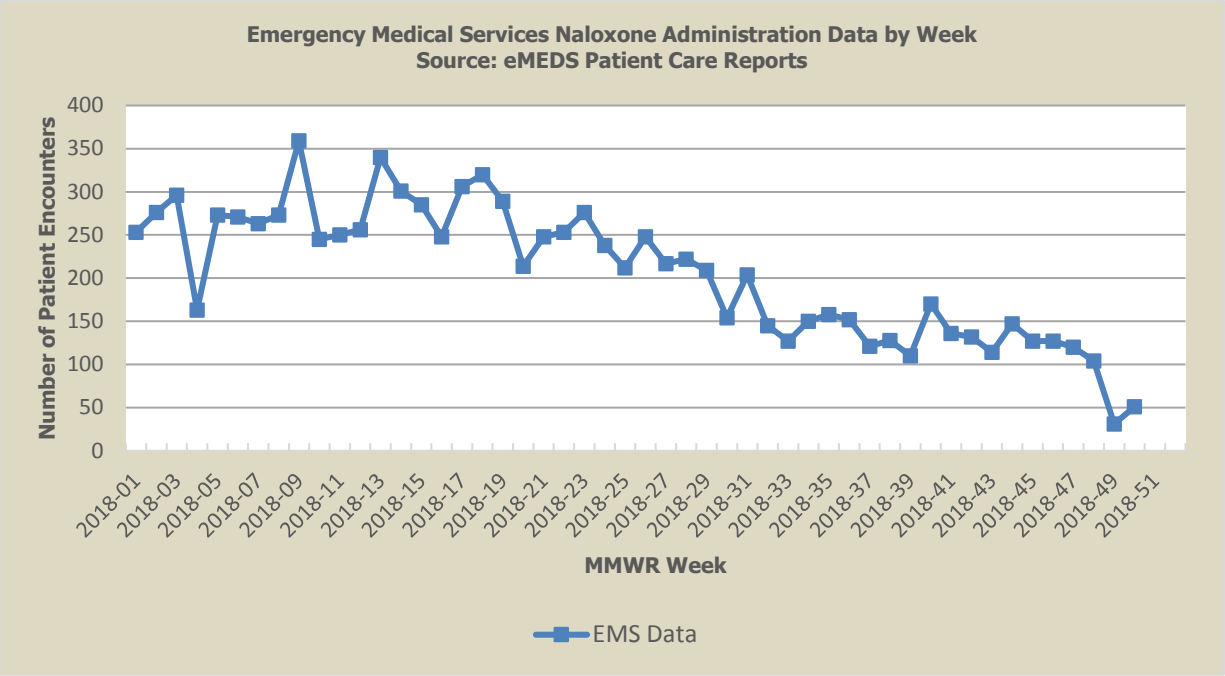
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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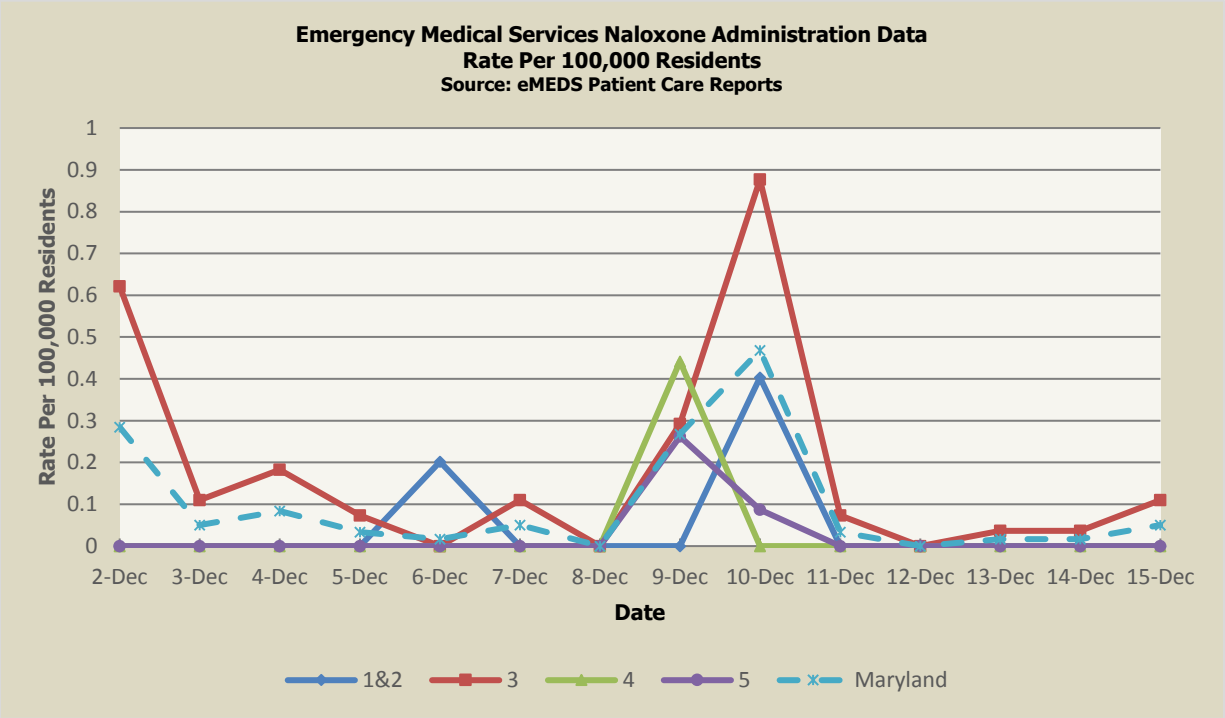
Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

	EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.28	0.36	0.32	0.13	0.26
Median Rate*	1.01	1.32	1.10	0.48	0.99

** Per 100,000 Residents*

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of December 21, 2018, the WHO-confirmed global total (2003-2018) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

AVIAN INFLUENZA (India), 15 Dec 2018, In a precautionary measure after several blood samples from chickens were found positive with bird flu virus in at least 3 villages under Brahmagiri block, the district administration today [13 Dec 2018] ordered for bird culling and a ban on poultry sold in the area. Informing on the steps, Puri Collector Jyoti Prakash Das said a decision has been taken to start bird culling within the radius of 1 kilometre [0.62 mile] from the affected area. The culling will begin Friday [14 Dec 2018], he added. Read More:
http://www.promedmail.org/post/6210437

AVIAN INFLUENZA (USA), 14 Dec 2018, A poultry farm in Wicomico County had an inconclusive test for avian influenza, leading to 40 000 chickens being put down at a farm in Powellville. The farm was experiencing "higher than normal mortality" and was submitted to the Maryland Department of Agriculture laboratory for a disease screening, according to a release from Delmarva Poultry Industry, Inc. [DPI]. Read More:
http://www.promedmail.org/post/6209958

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

ACUTE FLACCID MYELITIS (Multi-state), 19 Dec 2018, The Michigan Department of Health and Human Services [MDHHS] has confirmed a case of a mysterious paralyzing illness in an Ottawa County child. The MDHHS says it was notified of 2 more cases of acute flaccid myelitis [AFM] in children in Macomb and Ottawa counties, bringing Michigan's confirmed case count to 4, with 5 additional cases being investigated. Read More: http://www.promedmail.org/post/6215764

LEGIONELLOSIS (WISCONSIN), 18 Dec 2018, Three patients who contracted legionnaires' disease at the University of Wisconsin Hospital (UW Health) have died, CBS Madison affiliate WISC-TV reports. The hospital said on Monday [17 Dec 2018] that the 3 had serious, life-limiting health conditions. Ten other patients who contracted the disease have been discharged and are doing well, according to UW Health. The hospital has confirmed a total of 14 cases during the outbreak. Read More: http://www.promedmail.org/post/6214286

HEPATITIS A (Multi-state), 18 Dec 2018, Health officials in New Mexico are worried about the spread of hepatitis A. "Currently we have 13 acute laboratory-confirmed cases of hepatitis A in Bernalillo County. The vast majority are in the city of Albuquerque," said Dr Chad Smelser, deputy state epidemiologist with the New Mexico Department of Health. And that's just in a 2-month span. That's a big concern considering New Mexico typically only sees about 10 cases of the liver infection a year. Read More: http://www.promedmail.org/post/6213878

HEPATITIS A (KENTUCKY) 17 Dec 2018, Since [1 Aug 2017], the Kentucky Department for Public Health (DPH) has identified over 3000 cases of acute hepatitis A, a liver disease caused by the hepatitis A virus. An increase in cases since [1 Aug 2017], primarily among homeless people and drug users, prompted the declaration of a statewide outbreak in November 2017. Viral sequencing has linked several outbreak-associated cases in Kentucky with outbreaks in California and Utah. Read More: http://www.promedmail.org/post/6212689

SALMONELLOIS (USA) 17 Dec 2018, Outbreak of _Salmonella_ infections linked to ground beef. Since the last update on 15 Nov 2018, 87 more ill people have been added to this investigation. As of Wed 12 Dec 2018, 333 people infected with the outbreak strain of _Salmonella [enterica_ serotype] Newport have been reported from 28 states. Read More: http://www.promedmail.org/post/6208235

INTERNATIONAL DISEASE REPORTS

JAPANESE ENCEPHALITIS (INDIA), 20 Dec 2018, [Maharashtra] has recorded 108 cases [of Japanese encephalitis], mainly in endemic districts, in the past 11 months, as against 30 recorded throughout 2017. Culex mosquitoes, which feed on animal blood, especially pigs [and ardeid birds (herons, egrets and bitterns)], are the main vector of the disease [virus]. Read More: http://www.promedmail.org/post/6216363

SALMONELLOSIS (AUSTRIA), 19 Dec 2018, Austrian authorities are investigating an increase in cases of _Salmonella [enterica_ serotype] Coeln. In August and September [2018], cases caused by the pathogen _Salmonella_ Coeln cluster type (CT) 1768 occurred in several Austrian provinces. The Austrian Agency for Health and Food Safety (AGES) said the accumulation of infections indicates a possible transmission through food but there is currently no indication as to the source of the outbreak. Read More:
http://www.promedmail.org/post/6215784

ACUTE FLACCID MYELITIS (UNITED KINGDOM), 19 Dec 2018, Public Health England (PHE) is investigating an increase in reported cases of a rare condition called acute flaccid paralysis (AFP). So far in 2018, 28 cases have been reported in England, the majority of which have been since September [2018]. A rise in reported cases has also been seen in the United States. Read More: http://www.promedmail.org/post/6215766

SCHISTOSOMIASIS (PHILIPPINES), 18 Dec 2018, Concerns have been raised over the schistosomiasis outbreak in Baybay City [Leyte province], an area not known to be endemic for this chronic parasitic disease. Roderick Boyd Cerro, Department of Health (DOH) regional chief of epidemiology and surveillance unit, said the outbreak in 3 villages in Baybay City caught them by surprise since Baybay has no single case of snail fever in the past decade. Read More:
http://www.promedmail.org/post/6213414

TRYPANOSOMIASIS (BRAZIL), 18 Dec 2018, The Tocantins State Department of Health in Central Brazil has reported 14 confirmed cases of Chagas disease after a family consumed contaminated juice in Aparecida do Rio Negro, according to a Globo.com report [computer translated]. All the infected are from the same family and drank the juice of the bacaba, a type of palm tree from the Amazon. Read More: http://www.promedmail.org/post/6213413

LASSA FEVER (BENIN), 16 Dec 2018, Benin health officials announced this week 3 Lassa fever cases (2 confirmed, 1 probable) reported in the municipality of Parakou in Borgou Department in the northern part of the country. According to local press, the head of the department of public health, Dr. Emmanuel Obolli Job, said the cases all come from the village Taberou (Nigeria) located 5 km from Tandou in the commune of Tchaourou.
Read More: http://www.promedmail.org/post/6211773

SALMONELLOSIS (DENMARK), 12 Dec 2018, Officials in Denmark are investigating a salmonellosis outbreak with 32 cases and 19 hospitalizations. Initial information points to fresh pork as the source. Infections with _Salmonella [enterica_] monophasic Typhimurium have been reported to the Statens Serum Institut (SSI) since mid-October [2018]. _Salmonella_ monophasic Typhimurium is often found in pigs.
Read More: http://www.promedmail.org/post/6204049

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County